Case 2935

Lirobarleeia Ponder, 1983 (Mollusca, Gastropoda): proposed designation of Alvania nigrescens Bartsch & Rehder, 1939 as the type species

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Abstract. The purpose of this application is to designate *Alvania nigrescens* Bartsch & Rehder, 1939 as the type species of the gastropod genus *Lirobarleeia* Ponder, 1983 (family BARLEEIDAE Gray, 1857). *A. nigrescens* is common in shallow water surrounding the Galapagos Islands and is the species on which the genus was based. Ponder's (1983) designated type species was erroneously identified as *Alvania galapagensis* Bartsch, 1911, a similar deep water species known only from the type material.

Keywords. Taxonomy; nomenclature; Gastropoda; *Lirobarleeia*; *Lirobarleeia*; *Lirobarleeia*; *Lirobarleeia*; *Galapagos* Islands.

- 1. Ponder (1983, p. 243) established the genus *Lirobarleeia* based on his study (pp. 233–242) of a number of species of the family Barleeidae Gray, 1857. He designated *Alvania galapagensis* Bartsch, 1911 (pp. 347, pl. 30, fig. 9) as the type of the genus, believing his work on the anatomical, radular, opercular and shell characteristics to be conducted on specimens of this species. The species Ponder studied and described as the type of *Lirobarleeia* is common in shallow water in the Galapagos Islands, whereas the true *A. galapagensis* is known from a single lot (the holotype and two paratypes, catalog no. USNM 207590, in the United States National Museum, Washington) dredged from deep waters (1160 meters) near the Galapagos Islands by the U.S. Fisheries Bureau steamer *Albatross*. Ponder's (1983, figs. 12A–D) illustrations were of specimens from Santa Cruz Island in the Galapagos, now housed in the Australian Museum, Sydney: the shell, protoconch and operculum were of specimen no. AMS C.137206 and the radula was of specimen no. AMS C.137207.
- 2. Hertz (1994, figs. 1–3) figured the holotype of *Alvania galapagensis* Bartsch, 1911 and specimen AMS C. 137206 identified by Ponder (1983) as *A. galapagensis*, and described the differences between the two. Ponder (1983, p. 244) synonymized his '*A. galapagensis*' with *Alvania nigrescens* Bartsch & Rehder, 1939 (p. 8, pl. 2, fig. 5) and Hertz (1994, p. 110) confirmed the type species of *Lirobarleeia* as *A. nigrescens*. This species was originally described and illustrated from a single specimen (catalog no. USNM 472621 in the United States National Museum), collected during Franklin D. Roosevelt's 1938 Presidential cruise from San Diego, California to

Pensacola, Florida via the Panama Canal, and reportedly (pp. 8, 18) found in a tide pool on Old Providence Island in the Caribbean Sea (Isla de Providencia, Colombia). However, the locality data are probably incorrect and the true type locality was the Galapagos Islands where the expedition extensively collected during the cruise (see Ponder, 1983, p. 244; Hertz, 1994, p. 113). No specimens of this species have been reported from the Caribbean in the 57 years since *A. nigrescens* was first found.

- 3. Lirobarleeia nigrescens (Bartsch & Rehder, 1939) is the most common species of Lirobareelia in the Galapagos Islands but has been misidentified in the past because of its general similarity to Alvania galapagensis Bartsch, 1911. The latter is a deep water species that is more pear-shaped, with more flattened and widely separated nodes and less channeled sutures than L. nigrescens. A. galapagensis is known only from the holotype and two paratypes and no live specimens have ever been collected. Its correct generic placement is uncertain; it is tentatively included in Lirobarleeia based only on shell characters since as yet there have been no anatomical studies. Consequently, because so little is known about this taxon, and because its generic placement has not been confirmed, it would not be suitable as the type species of Lirobarleeia.
- 4. Hertz (1994, p. 116) noted that, since Ponder's extensive anatomical studies to support the creation of the genus *Lirobarleeia* were all conducted on specimens of *L. nigrescens* (*L. galapagensis* of Ponder, 1983) and it was clearly this species that was intended as the type of *Lirobarleeia*, it seemed appropriate that *L. nigrescens* be specified as the type species of the genus. We are accordingly submitting our application to the Commission under the provisions of Articles 70b and 79a of the Code.
- 5. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Lirobarleeia* Ponder, 1983 and to designate *Alvania nigrescens* Bartsch & Rehder, 1939 as the type species;
 - (2) to place on the Official List of Generic Names in Zoology the name *Lirobarleeia* Ponder, 1983 (gender: feminine), type species by designation in (1) above *Alvania nigrescens* Bartsch & Rehder, 1939;
 - (3) to place on the Official List of Specific Names in Zoology the name *nigrescens* Bartsch & Rehder, 1939, as published in the binomen *Alvania nigrescens* (specific name of the type species of *Lirobarleeia* Ponder, 1983).

References

- Bartsch, P. 1911. The Recent and fossil mollusks of the genus *Alvania* from the west coast of America. *Proceedings of the United States National Museum*, **41**: 333–362.
- Bartsch, P. & Rehder, H.A. 1939. Mollusks collected on the Presidential Cruise of 1938. Smithsonian Miscellaneous Collections, 98(10): 1-18.
- Hertz, J. 1994. Review of the type species of *Lirobarleeia Ponder*, 1983. *The Veliger*, 37(1): 110–116.
- Ponder, W.F. 1983. Review of the genera of the Barleeidae (Mollusca: Gastropoda: Rissoacea). *Records of the Australian Museum*, **35**(6): 231–281.